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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/006,992

12/06/2001

Lawrence W. Stark

018158-018610US

1090

20350

7590

06/15/2006

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EXAMINER

SHAY, DAVID M

ART UNIT

PAPER NUMBER

3735

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,992

Applicant(s)

STARK ET AL.

Examiner

david shay

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 21, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-20 and 36-44 is/are pending in the application.
- 4a) Of the above claim(s) 43 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-20 and 36-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

Newly submitted claims 44 and 44 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the newly claimed method is not related to determining the accuracy of a gradient array as this term is defined in the originally filed disclosure, as the claimed steps are only disclosed in the context of a single datum.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original for prosecution on the merits. Accordingly, claims 31-39 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP 821.03.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant is required to cancel the new matter in the reply to this Office Action.

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35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-20 and 36-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is merely a calculation and thus falls within the realm of a mental process.

According to the originally filed specification, “An accuracy of at least one of the gradients of the gradient array may be determined by calculating a change in elevation along a closed integration path” (see the originally filed specification page 3, lines 18-20). Thus, since it is well known that integration is defined as the sum of a the difference between the value of a function at a given point and the value of that function at a second, nearby point, divided by the difference between the points as the difference between the points approaches zero, the integration in the claims represents the change in elevation along the closed integration path, and thus performing the integration is determining the accuracy of the gradient array, as set forth in the originally filed disclosure. Thus, the applied combination clearly teaches the claimed method.

Applicant also argues “None of the cited references have been shown to teach or suggest this combination of elements” with respect to claim 36 which recites “determining the accuracy of a gradient array in an optical tissue measurement that includes transmitting a source image from a light source posteriorly through the optical tissues and into the retina to define the image, wherein the image is transmitted posteriorly through a central region of the cornea, the central region having a size which is significantly less than a pupil size of the eye, and wherein the

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image is transmitted from the retina anteriorly through the optical tissues.” However, as can be easily seen from Figure 7 of Burns et al, the only portion of the above recitation that is not satisfied by the Burns et al reference alone is the portion related to “determining the accuracy”, which as has already been discussed above, is satisfied by the integration of Seibel. Thus this argument is not convincing.

Claims 18-20 and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seibel et al in combination with Odrich et al and Burns. Seibel et al teach a method such as claimed except the transmission through optical tissue, reflection from the retina and a plurality of beamlets. Burns teach a spatially resolved refractometer, which transmits images through the cornea and receives images reflected off the retina. Odrich et al teach mapping the surface contour of the cornea using a spatially resolved refractometer. It would have been obvious to employ the refractometer of Burns in the method of Odrich et al and to produce the contour data by the close integration path method of Seibel et al, since Odrich et al discusses no method to produce the contour data required for the method, thus producing a method such as claimed.

Applicant's arguments filed March 21, 2006 have been fully considered but they are not persuasive. The arguments are not persuasive for the reasons set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II, can be reached on Monday, Tuesday, Wednesday, Thursday, and

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Friday. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

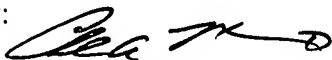
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAVID M. SHAY
PRIMARY EXAMINER
GROUP 330

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing

below:



Charles Marmor II.

SPE, Art Unit 3735